

**REMARKS**

Claims 1-16, and 18-21 are currently pending in this application. Claim 17 has been cancelled, without prejudice. Claims 1, 2, 16, 18 and 20 have been amended. No new matter has been introduced as a result of these amendments. Entry of the amendments is therefore requested.

Claim 1 has been objected to for informalities. Claim 1 has also been rejected under 35 U.S.C. §112, paragraph 2 for having insufficient antecedent basis. Applicants have amended the claim to overcome the objection/rejection and respectfully traverse.

Claims 1 and 13 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Lu et al.* (US # 5,504,524). Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Lu et al* (US # 5,504,524). Claims 2-9, 14-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Lu et al* (US # 5,504,524) in view of *Baumeister* (US # 4,684,995). Claims 10 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Lu et al* (US # 5,504,524) in view of *Baumeister* (US # 4,684,995) and further in view of *Yamaguchi* (US # 5,638,123). Applicants respectfully traverse the rejections.

Independent claims 1 and 16 have been amended to better define the claim language and limitations.

*Lu* does not disclose “an analog to digital converter which produces a digital output indicative of an output of each pixel of said image sensor” as recited in claim 1, and

similarly recited in claim 14. The Examiner has relied on Figs. 2-3 in the *Lu* reference to assert that such a converter is disclosed, yet this is incorrect. Fig. 3 is a detailed illustration of the digital color balance controller (ref. 10) of Fig. 2. The discussion of Fig. 3 clearly states that the “COMP. (PART A/D)” reference of Fig. 2 is comprised of “four comparators which are arranged to compare the received signal against one of four threshold levels V1 to V4” (col. 6, lines 48-51). *Lu* further notes that the level of exposure is determined by the variation in analog voltage levels present at each comparator (col. 6, lines 53-57). The outputs of the comparator are then ORed together in different ways to determine if any of the signals reached or exceeded a particular threshold (col. 6, lines 58-col. 7, lines 1-3).

Similarly, independent claim 16 recites “obtaining a plurality of digital values, said plurality of digital values representing values of said pixels.” Further to the arguments above, *Lu* does not obtain “a plurality of digital values . . . representing values of said pixels”, since the value output from the comparator is not representative of the value of the pixel, but instead represents the relation between the pixel signal and a compared voltage.

Additionally, *Lu* does not teach or suggest “threshold detectors which compares counting results of said first and second counters with desired thresholds” as recited in claim 1, and similarly recited in claim 14. While *Lu* shows threshold detectors (13a-c), they are not comparing “counting results of said first and second counters with desired thresholds,” but are comparing the signals themselves against a predetermined voltage threshold as discussed above.

It follows that *Lu* could also not possibly teach or suggest the limitation of

reviewing “only certain most significant bits of at least a plurality of said digital outputs, to thereby characterize said pixel according to its exposure characteristics” as recited in claim 14 and similarly in claim 16, since *Lu* teaches only the use of the voltage signals being outputted from the comparators (col. 6, lines 48-col. 7, lines 1-8).

*Baumeister* does not resolve the deficiencies of *Lu*, and also teaches away from the disclosure in *Lu*. The MSB/LSB word split disclosed in *Baumeister* is not applicable to the teaching in *Lu*, since *Lu* only uses single bit determinations in its exposure-correcting system. Accordingly, *Baumeister* is not properly combinable with the teaching of *Lu*. Accordingly, claims 1, 14 and 16, and all claims that depend therefrom, are patentable over the cited art.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

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